

STATE OF SOUTH CAROLINA

(Caption of Case)

Application of Duke Energy Carolinas, LLC for
Approval of Energy Efficiency Plan Including an
Energy Efficiency Rider and Portfolio of Energy
Efficiency Programs

BEFORE THE
PUBLIC SERVICE COMMISSION
OF SOUTH CAROLINA

COVER SHEET

DOCKET

NUMBER: 2007 - 358 - E

(Please type or print)

Submitted by: Jeremy C. Hodges

SC Bar Number: 71123

Address:

Nelson Mullins

Telephone:

803-255-9766

1320 Main St., Meridian 17th Floor

Fax:

803-255-9164

Columbia, SC 29201

Other:

Email: jeremy.hodges@nelsonmullins.com

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DOCKETING INFORMATION (Check all that apply)

- ☐ Emergency Relief demanded in petition ☐ Request for item to be placed on Commission's Agenda expeditiously
- ☒ Other: Surrebuttal Testimony of Frank Yoho on Behalf of Piedmont Natural Gas

INDUSTRY (Check one)	NATURE OF ACTION (Check all that apply)		
<input checked="" type="checkbox"/> Electric	<input type="checkbox"/> Affidavit	<input checked="" type="checkbox"/> Letter	<input type="checkbox"/> Request
<input type="checkbox"/> Electric/Gas	<input type="checkbox"/> Agreement	<input type="checkbox"/> Memorandum	<input type="checkbox"/> Request for Certification
<input type="checkbox"/> Electric/Telecommunications	<input type="checkbox"/> Answer	<input type="checkbox"/> Motion	<input type="checkbox"/> Request for Investigation
<input type="checkbox"/> Electric/Water	<input type="checkbox"/> Appellate Review	<input type="checkbox"/> Objection	<input type="checkbox"/> Resale Agreement
<input type="checkbox"/> Electric/Water/Telecom.	<input type="checkbox"/> Application	<input type="checkbox"/> Petition	<input type="checkbox"/> Resale Amendment
<input type="checkbox"/> Electric/Water/Sewer	<input type="checkbox"/> Brief	<input type="checkbox"/> Petition for Reconsideration	<input type="checkbox"/> Reservation Letter
<input type="checkbox"/> Gas	<input type="checkbox"/> Certificate	<input type="checkbox"/> Petition for Rulemaking	<input type="checkbox"/> Response
<input type="checkbox"/> Railroad	<input type="checkbox"/> Comments	<input type="checkbox"/> Petition for Rule to Show Cause	<input type="checkbox"/> Response to Discovery
<input type="checkbox"/> Sewer	<input type="checkbox"/> Complaint	<input type="checkbox"/> Petition to Intervene	<input type="checkbox"/> Return to Petition
<input type="checkbox"/> Telecommunications	<input type="checkbox"/> Consent Order	<input type="checkbox"/> Petition to Intervene Out of Time	<input type="checkbox"/> Stipulation
<input type="checkbox"/> Transportation	<input type="checkbox"/> Discovery	<input type="checkbox"/> Prefiled Testimony	<input type="checkbox"/> Subpoena
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<input type="checkbox"/> Water/Sewer	<input type="checkbox"/> Expedited Consideration	<input type="checkbox"/> Proposed Order	<input checked="" type="checkbox"/> Other: Testimony
<input type="checkbox"/> Administrative Matter	<input type="checkbox"/> Interconnection Agreement	<input type="checkbox"/> Protest	
<input type="checkbox"/> Other:	<input type="checkbox"/> Interconnection Amendment	<input type="checkbox"/> Publisher's Affidavit	
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Moore&VanAllen

James H. Jeffries IV
Attorney at Law

T 704 331 1079
F 704 339 5879
jimjeffries@mvalaw.com

Moore & Van Allen PLLC

Suite 4700
100 North Tryon Street
Charlotte, NC 28202-4003

January 29, 2008

VIA E-FILING AND UPS OVERNIGHT

Mr. Charles Terreni
Chief Clerk Administrator
Public Service Commission of South Carolina
101 Executive Center Drive
Columbia, South Carolina 29210

Re: Docket No. 2007-358-E Application of Duke Energy Carolinas, LLC for Approval of Energy Efficiency Plan Including an Energy Efficiency Rider and Portfolio of Energy Efficiency Programs

Dear Mr. Terreni:

Enclosed please find an original and 2 copies of the *Surrebuttal Testimony and Exhibit of Frank Yoho on Behalf of Piedmont Natural Gas Company, Inc.* in the docket shown above. Please accept the original and one copy for filing and return the additional "filed-stamped" copy to me in the enclosed self-addressed postage paid envelope.

Thank you for your assistance with this matter. If you have any questions about this filing you may reach me at the number shown above.

Sincerely,

s/ James H. Jeffries IV
James H. Jeffries IV

Enclosures

c: Jeremy C. Hodges
David Carpenter
All Parties of Record

**Before the
Public Service Commission of South Carolina**

Docket No. 2007-358-E

**Application of Duke Energy Carolinas, LLC for Approval of
Energy Efficiency Plan Including an Energy Efficiency Rider and
Portfolio of Energy Efficiency Programs**

**Surrebuttal Testimony and Exhibit
of
Frank Yoho**

**On Behalf Of
Piedmont Natural Gas Company, Inc.**



January 29, 2008

1 **Q. Please state your name, business address, and position with Piedmont**
2 **Natural Gas.**

3 A. My name is Frank Yoho. My business address is 4720 Piedmont Row
4 Drive, Charlotte, North Carolina and I am the Senior Vice President –
5 Commercial Operations for Piedmont Natural Gas Company, Inc.
6 (Piedmont).

7 **Q. Have you previously filed testimony in this proceeding?**

8 A. Yes. I prefiled direct testimony in this proceeding on January 17, 2008.

9 **Q. What is the purpose of your surrebuttal testimony?**

10 A. The purpose of my surrebuttal testimony is to respond to several matters
11 raised in the rebuttal testimony of Duke Energy Carolinas, LLC's
12 (Duke's) witnesses Janice Hager and Theodore Schultz relating to
13 Piedmont's concerns and proposals over several aspects of Duke's Save-
14 A-Watt program initiative. Specifically, my surrebuttal testimony: (1)
15 explains why Ms. Hager is incorrect in her conclusions about the validity
16 of Piedmont's analysis of the relative efficiencies of gas-fired generation
17 versus the direct use of gas in applications where the two compete; (2)
18 clarifies why Duke's expressed "intent" with respect to the load-building
19 potential of its Save-A-Watt proposals is far less important than the
20 readily foreseeable load building potential of those programs; (3)
21 demonstrates that, contrary to Ms. Hager's testimony, an analysis of
22 costs, and particularly avoided power plant investment costs, is at the
23 very core of Piedmont's proposals in this proceeding; (4) explains why
24 Duke's opposition to a collaborative approach to energy efficiency is both
25 inconsistent with Duke's stated Save-A-Watt goals and contrary to the

1 public interest; and (5) explains the fundamental differences between the
2 natural gas and electric markets in South Carolina which prompt
3 Piedmont's concerns in this docket.

4 **Q. Is Ms. Hager correct in her assertion that Piedmont's comparison of**
5 **the relative efficiency of natural gas and electricity is invalid and**
6 **irrelevant?**

7 A. No, she is not. Duke's stated purpose in this proceeding is to "Save
8 Watts" by utilizing energy efficiency to reduce future electric demand
9 growth which, in turn, reduces the need for new power plant construction
10 to serve that load. As Mr. Rogers indicates in his direct testimony, "the
11 most environmentally sound, cost-effective and reliable kilowatt of
12 electricity may well be the one we do not have to generate." In order to
13 achieve the goal of minimizing electric generation needs, Duke must, to
14 the maximum extent possible, avoid building additional electric load
15 (which will, in turn, require the construction of additional generation
16 capacity and transmission infrastructure). Given that a majority of
17 additional electric generation capacity on the Duke system for the
18 immediate past and for the near term future has been and will be natural
19 gas-fired generation, it is eminently reasonable to ask, from a public
20 interest perspective, whether it is better to burn gas to generate
21 incremental electric capacity to serve retail electric needs or to utilize that
22 same gas to serve retail customer needs directly. Piedmont's comparative
23 analysis is aimed directly at that question. More particularly, Piedmont's
24 comparative analysis is aimed directly at the question of whether this
25 Commission should be in the business of approving direct economic

1 incentives (and in this case economic incentives proposed by Duke to be
2 funded by South Carolina energy consumers) that will result in an
3 increase in the need for additional natural gas-fired generation when the
4 direct use of natural gas is able to serve those same needs more
5 efficiently, at lower costs, and with fewer greenhouse gas (GHG)
6 emissions. Piedmont's direct testimony establishes that it is more
7 efficient on a multi-fuel, total fuel cycle efficiency and investment cost
8 basis, to serve these needs directly than it is to burn natural gas to
9 generate electricity to serve these same needs. Piedmont's direct
10 testimony also establishes that using natural gas in this manner generates
11 fewer GHG emissions than using gas to generate electricity for the same
12 end uses

13 **Q. Are higher energy efficiency and lower GHG emissions the only**
14 **reasons supporting the use of natural gas to serve customer needs**
15 **directly when those needs would otherwise require the construction**
16 **of incremental gas-fired generation capacity?**

17 **A.** No. In fact, the major benefit to using natural gas to serve customer
18 needs directly is the enormous avoided costs associated with not having
19 to build additional incremental gas-fired generation facilities and related
20 electric transmission infrastructure to serve those needs. On an order of
21 magnitude basis, just the capital costs associated with building 1,000
22 megawatts of new gas-fired generation capacity is roughly \$1 billion.
23 This does not include any associated transmission costs. If the demand
24 served by such facilities can be met by other, more efficient forms of

1 energy, such as the direct use of natural gas, then electric customers will
2 benefit substantially.

3 **Q. What is your response to Ms. Hager's contention that Piedmont**
4 **should be comparing the relative efficiency of Duke's total**
5 **generation mix to the direct use of natural gas?**

6 A. My response is that this proceeding is forward looking not backward
7 looking. By this, I mean that we are focused on the benefits of avoiding
8 the need to build additional gas-fired electric generation capacity
9 (whether single cycle or combined cycle) rather than the justification for
10 Duke's construction of its existing generation mix. And as I just
11 described, and as is discussed in my direct testimony and that of Mr.
12 Skains, it is far more efficient and far less emitting to use natural gas to
13 directly serve incremental demand for space and water heating load than
14 it is to use natural gas to generate electricity for those needs. In addition,
15 the price signals that result from the Carolinas mix rate structure cited by
16 Ms. Hager actually impede the achievement of the stated goals of Save-
17 A-Watt because incremental electric capacity is rolled into embedded
18 capacity and priced to electric consumers well below incremental costs.

19 **Q. Do you have any comments on Ms. Hager's assertion that Duke is a**
20 **summer peaking utility, therefore, displacement of gas-fired space**
21 **heating equipment should not be a concern?**

22 A. Yes. While it is true that Duke is currently a summer peaking utility, that
23 fact is not necessarily indicative of what may happen in the future. For
24 example, electric utilities serving the Florida market are winter peaking
25 due to the predominance of heat pump usage in Florida and the high rates

1 of electricity consumption associated with the electric strip heating
2 elements in heat pumps. This is true notwithstanding the very high air-
3 conditioning load associated with the summertime climate conditions in
4 Florida. The programs Duke proposes to implement in conjunction with
5 its Save-A-Watt program contemplate the provision of ratepayer funded
6 subsidies promoting the installation of electric heat pumps in South
7 Carolina residences and businesses. Every electric heat pump installed
8 under the Save-A-Watt program will increase Duke's winter peak,
9 thereby increasing the possibility that gas-fired combustion turbines will
10 eventually be used to meet that peak.

11 **Q. Do you have other concerns with the promotion of electric heat pump**
12 **installations?**

13 A. Yes, our experience in the market shows that with respect to new
14 construction, if a builder or homeowner installs a heat pump for space-
15 heating purposes, the likelihood is that an electric water heater will also
16 be installed because it is typically uneconomical for gas infrastructure to
17 be extended into developments where the heat load is all-electric. As a
18 practical matter, this means that installation of heat pumps in new
19 construction facilitated by Save-A-Watt incentives will influence the
20 installation of electric water heaters, and will add to Duke's winter peak
21 and year- round baseload requirements.

22 **Q. Do you have any comments on Ms. Hager's statement that no**
23 **residential water heating incentives are contemplated under Duke's**
24 **Save-A-Watt program?**

1 A. Yes. I would note that while this statement is welcome news, I have
2 found no indication in Duke's filings (other than Ms. Hager's statement
3 in her rebuttal testimony) that would appear to so limit Duke's programs.
4 As a general statement, Duke's filings provide virtually no detail about
5 what end-uses may be promoted under its Save-A-Watt incentive
6 programs. I would also note that Ms. Hager's statement is limited to
7 residential water heating and does not address commercial water heating,
8 where natural gas holds the same efficiency and emissions advantages
9 compared to gas-fired electricity. I stand by my general objections to
10 Duke's programs as reflected in my direct testimony.

11 **Q. Do you have any comments on Ms. Hager's contention that Duke's**
12 **Save-A-Watt proposals are not intended to increase demand?**

13 A. I have several. First, and as I indicated in my direct testimony, the stated
14 "intent" of Duke's programs is less significant than their probable and
15 foreseeable results. Given that natural gas is always a competitive
16 alternative to residential and commercial space and water heating, it is
17 substantially certain that any Commission approved economic subsidies
18 provided to customers to promote the installation of electric equipment,
19 either in new construction or in replacement of existing equipment, will
20 displace gas in many circumstances. While Ms. Hager has indicated that
21 this is not Duke's intent, she has not provided any reassurance that such
22 displacement will not occur under Duke's programs. To the contrary, she
23 admits that it will occur, as does Duke witness Mr. Schultz. The question
24 for the Commission is whether it is in the public interest for it to be an
25 active party to such displacement by approving the incentives proposed

1 by Duke in these programs. Second, as I understand Duke's Save-A-Watt
2 proposals, there is no hard "ceiling" on Duke's base demand under the
3 program. If I understand Duke's program correctly, this means that Duke
4 can add as much additional load as they want, thereby gaining retail
5 electric revenues, and still recover avoided costs on any calculated
6 "efficiencies" they generate. This means that Duke will be compensated
7 for any avoided generation requirements through the Save-A-Watt rider
8 and also be compensated through existing rate structures for any
9 additional load they generate under the competitive features of the Save-
10 A-Watt program and potentially be forced to build additional generation.
11 I point this out to show that this particular aspect of the Save-A-Watt
12 program is a "win-win" proposition for Duke and no disincentive exists
13 to load building through the use of ratepayer funded incentives under the
14 program. Duke's stated "intent" not to build load under the Save-A-Watt
15 program must be considered in this context.

16 **Q. What is your response to Ms. Hager's contention that costs are not**
17 **included in Mr. Yoho's recommended incentive plan evaluation**
18 **principles?**

19 **A.** In making this assertion, I believe Ms. Hager misses the entire point of
20 our testimony. First, the principle Ms. Hager cites is that "energy
21 efficiency programs, especially those that are proposed for competitive
22 markets served by regulated natural gas and electric utilities, should be
23 analyzed on a comprehensive and multi-fuel basis looking at reasonably
24 available competing energy products and services and the likely impacts
25 of the proposed programs, including impacts on load growth,

1 competition, cost structures, avoided capital investments, overall supply
2 and demand, and customer comfort and convenience.” This principle
3 specifically says that incentive programs should be evaluated
4 comprehensively, taking into consideration competing/alternative
5 products and services and looking at impacts on load growth, cost
6 structures, avoided capital investments, and overall supply and demand.
7 In my view, each of these matters has direct and indirect cost implications
8 for Duke and its customers. Accordingly, I do not agree that cost impacts
9 are not a part of Piedmont’s proposed incentive plan evaluation
10 principles. Second, and more to the point, one of the primary messages
11 of Piedmont’s testimony is that subsidies should not be used to promote
12 increased electric demand where that demand will lead to the need to
13 build very expensive incremental electric generation facilities and related
14 transmission infrastructure and the same needs can be served more
15 efficiently through the direct use of natural gas. This is a clear
16 contradiction of the stated objective of Duke’s Save-A-Watt program.

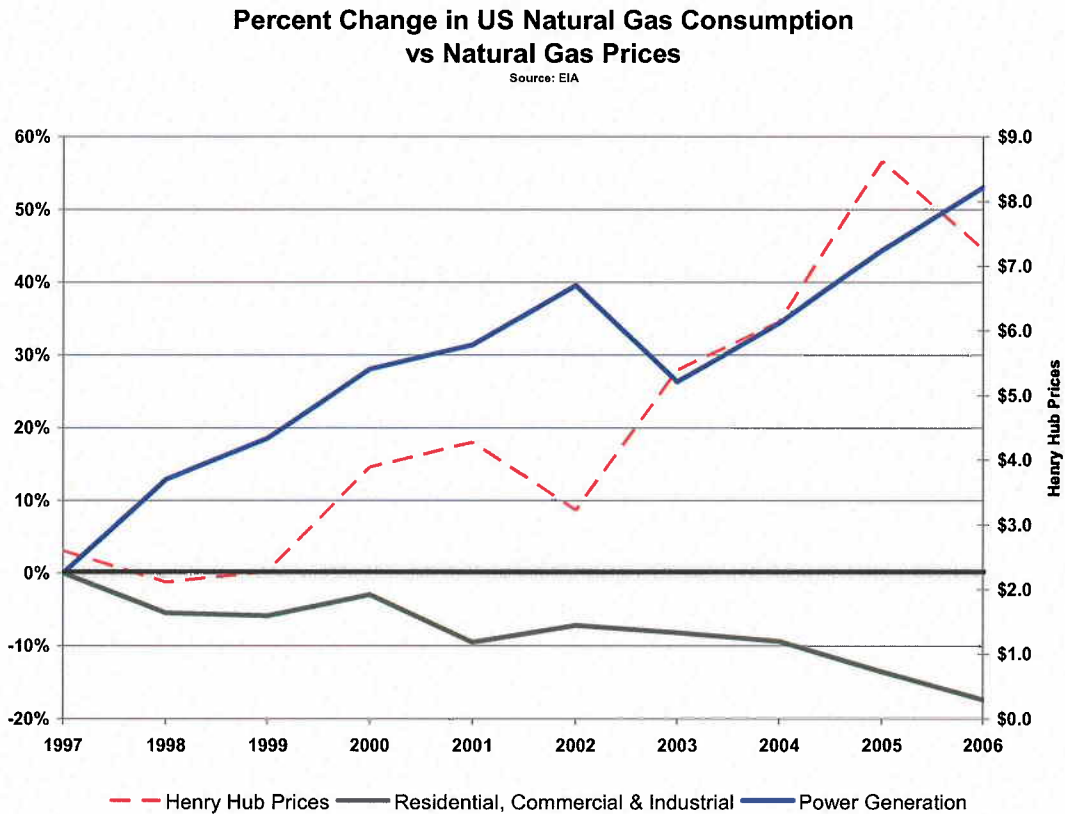
17 **Q. Do you have any comments on Ms. Hager’s or Mr. Schultz’s**
18 **speculation that customers would not be harmed by the Save-A-Watt**
19 **program’s potential displacement of natural gas because natural gas**
20 **is more expensive than electricity?**

21 **A.** Yes I do. As an initial matter, I would point out that the contention that
22 natural gas is more expensive than electricity is substantially meaningless
23 without a detailed examination of a specific generation mix and end-use
24 application. In other words, you simply cannot determine the relative
25 expense of either energy source except in the context of some specific use

1 of that energy and a comprehensive analysis of total fuel cycle
2 efficiencies. Neither Ms. Hager nor Mr. Schultz provide any such
3 analysis and, as a result, I do not accept their conclusions. In fact, I
4 believe that the cost per Btu of natural gas is cheaper than electricity
5 based upon Duke and Piedmont's posted residential rates for South
6 Carolina customers. But, again, without an analysis of total fuel cycle
7 efficiencies in the context of a specific application, that calculation is not
8 particularly meaningful.

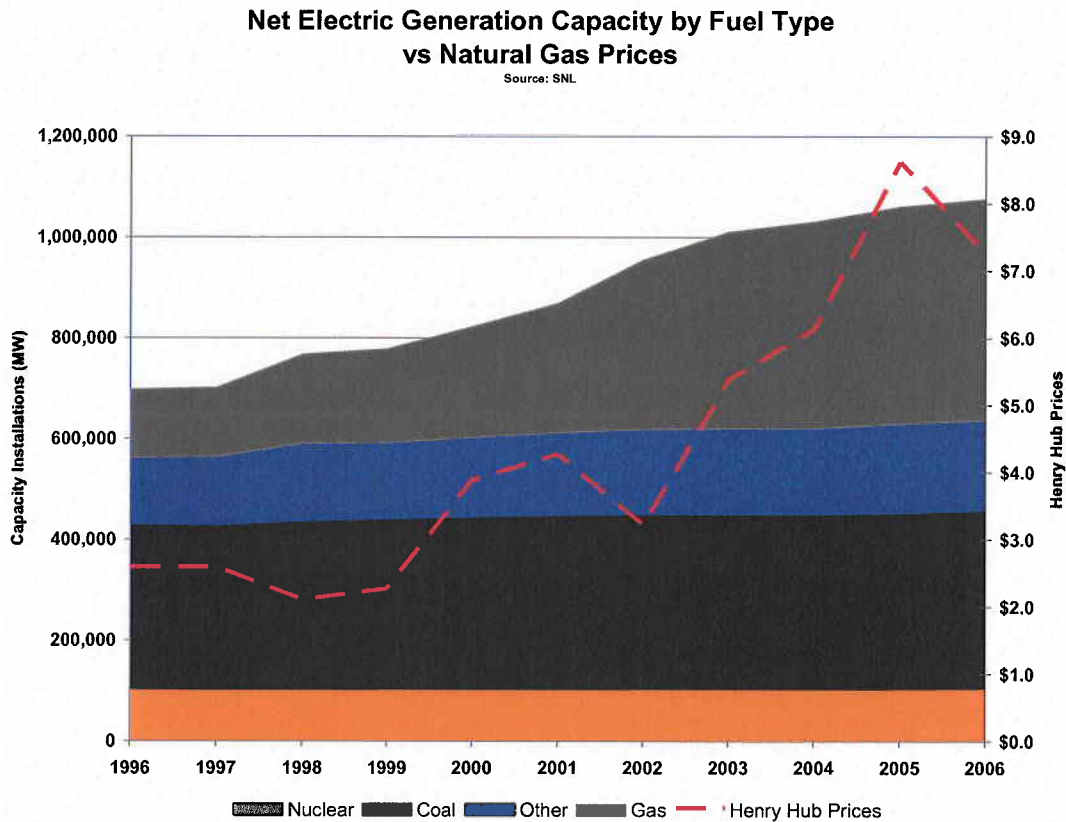
9 **Q. Do you have any other thoughts about Duke's "gas is more expensive**
10 **and volatile than electricity" argument?**

11 A. Yes. I think the argument that high and volatile gas prices should
12 mitigate displacement concerns is both ironic and misleading. One of the
13 primary reasons natural gas prices have increased substantially in recent
14 years is the dramatic increase in demand from gas-fired electric
15 generation facilities. This phenomenon is widely known in the industry
16 and was discussed as recently as this week in a Gas Daily article by
17 analysts from Credit Suisse, a copy of which is attached (with permission
18 from the publisher) to my testimony as Exhibit __ (FHY-1). It is also
19 illustrated by the charts shown below.



The foregoing chart illustrates that for the last ten years natural gas consumption by residential, commercial and industrial customers in the United States has declined on an absolute basis while consumption by gas-fired electric generation facilities has increased dramatically. Wholesale natural gas prices have tracked the increase in gas-fired power generation use. Similarly, as reflected by the chart below, during the same period the generation of electricity through the use of gas-fired electric generation has also increased substantially while other sources of electric generation have remained flat. As was the case above, wholesale gas cost increases have tracked the increase in gas-fired electric

1 generation.



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Ms. Hager herself indicates that Duke intends to continue to expand its reliance on gas-fired generation – indicating a projected 1600% increase in the existing levels of gas-fired generation on Duke’s system in the next 20 years – from 0.003% to 0.05% of the total South Carolina generation mix. It is disingenuous for Ms. Hager to cite high and volatile natural gas prices as a mitigation factor for displacement concerns, when electric generation demand created by Duke and other electric companies caused these market conditions and Duke is subject to the same high and volatile prices for its gas-fired generation consumption. As explained by Mr. Skains in his direct testimony, and supported by Duke witness Charles

1 Cicchetti, Duke is subject to these same natural gas market prices for its
2 gas-fired power generation, but the costs to electric consumers are
3 masked by rolled-in ratemaking, with the result that true market price
4 signals are not being sent to their customers, which is a deterrent to
5 achieving the stated objectives of Save-A-Watt.

6 **Q. How does the effect of electric generation demand on natural gas**
7 **supplies impact natural gas customers?**

8 A. The table above indicates that natural gas customers have a large stake in
9 the issue of incremental electric demand served by gas-fired generation
10 because of the upward pressure on wholesale gas costs associated with
11 increased electric generation demand. Any measures taken to reduce
12 demand from gas-fired electric generation will put downward pressure on
13 wholesale natural gas costs, benefiting both electric and natural gas
14 ratepayers.

15 **Q. Do you agree with Ms. Hager that the proper focus of the**
16 **Commission's analysis is on the difference between retail natural gas**
17 **and electric rates?**

18 A. No. The point of this proceeding, as clearly stated in Duke's Save-A-
19 Watt filing, is to address how best to avoid the substantial incremental
20 capital costs associated with new power plant construction and associated
21 transmission infrastructure. The relevant cost comparison in this context
22 is the relative cost of providing incremental electric capacity (using gas-
23 fired combustion turbines) and the comparable costs of serving the
24 incremental needs of end users through reasonably available competitive
25 alternatives, such as the direct use of natural gas. Comparing retail gas

1 and electric rates is simply not meaningful for purposes of this
2 proceeding. Her focus appears to be backward looking whereas my
3 understanding of the Save-A-Watt proposal is that it is focused on
4 avoiding future power plant construction and the associated costs.

5 **Q. How do you react to Duke's disinclination to participate in a**
6 **collaborative process to address concerns over its Save-A-Watt**
7 **program?**

8 A. I am a little puzzled by that reaction. Duke appears to have been very
9 willing to engage in a collaborative process with parties it self-selected
10 prior to the filing of its Save-A-Watt proposal and touts collaboration as a
11 key to bringing stakeholders together but it is apparently unwilling to
12 engage in a similar process with Piedmont in an effort to arrive at a more
13 efficient and lower emitting approach to meeting the energy needs of
14 South Carolina citizens in the future. I can see no potential harm from
15 engaging in such a discussion with the approval of the Commission and
16 the participation of the ORS, yet Duke is apparently unwilling to engage
17 in that process. I also question Duke's position on collaboration based on
18 its expressed goal of maximizing energy efficiency. It seems to be a
19 fairly basic proposition that if Duke sincerely wants to maximize
20 "energy" efficiency (as opposed to electric efficiency), then they would
21 want to consider the relative efficiencies of competing alternative sources
22 of energy, such as natural gas, and how different energy applications can
23 help them reduce the need for additional generation. Duke is apparently
24 unwilling to have a discussion of these matters with Piedmont and also

1 opposes the Commission's consideration of the relative efficiencies of
2 alternative energy sources.

3 **Q. Mr. Yoho, can you give us an example of a Piedmont-Duke energy**
4 **efficiency program that could offer significant energy efficiency**
5 **benefits, as well as avoided cost and GHG emission savings for South**
6 **Carolina energy consumers if pursued jointly through a collaborative**
7 **process?**

8 A. Yes. One example would be a jointly funded program seeking to convert
9 existing electric water heating loads in South Carolina to high-efficiency
10 tankless natural gas water heating systems. This program would reduce
11 Duke's summertime peak demand, save electric ratepayers from having to
12 pay the capital, transmission, and operating costs they would otherwise
13 incur to construct and operate new gas-fired electric generation peaking
14 facilities, substantially improve the relative efficiency of providing water
15 heating service to South Carolina consumers, and reduce the amount of
16 GHG emissions released into the environment in order to serve this
17 customer need while at the same time reducing the customer's annual
18 energy operating costs. This program would be a clear winner for Duke,
19 Piedmont, and, most importantly, the energy consumers of South
20 Carolina. Because this program would require the cooperation of both
21 Duke and Piedmont to work, it can most readily be accomplished through
22 a cooperative effort under the supervision of the Commission, such as the
23 collaborative process suggested by Piedmont.

1 **Q. Are there other programs that could promote higher efficiency,**
2 **avoided cost savings, and lower emissions for South Carolina citizens**
3 **if pursued jointly by Duke and Piedmont?**

4 A. Yes. We believe that similar win-win-win opportunities exist with
5 respect to other equipment/provider combinations (including commercial
6 and industrial cooling opportunities) that could be pursued on a joint
7 basis under the Commission's supervision.

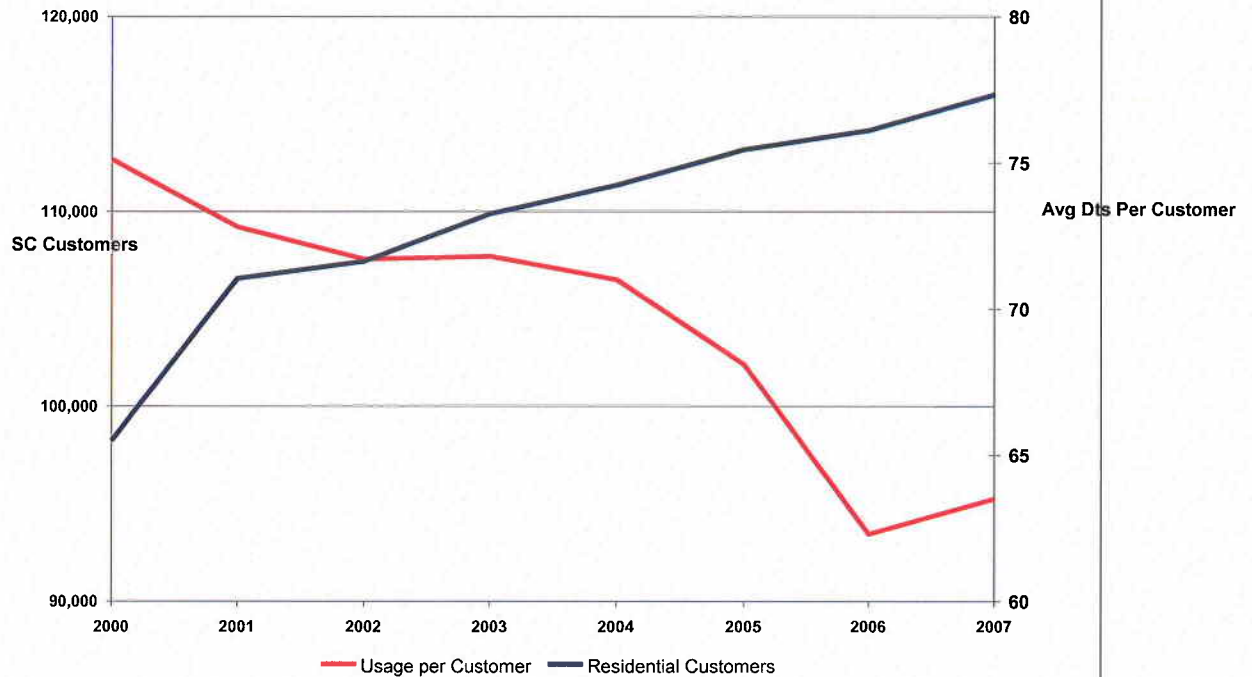
8 **Q. How do you react to Duke's implied criticism that Piedmont is not**
9 **actively engaged in efficiency programs in South Carolina and that**
10 **Piedmont should respond to Duke's programs by adopting incentive**
11 **programs of their own?**

12 A. At best, I believe it demonstrates a fundamental misunderstanding of the
13 differences between the natural gas and electricity markets in South
14 Carolina and the respective positions of Duke and Piedmont?

15 **Q. What do you mean by that?**

16 A. Since 2000, and as demonstrated by the chart below, Piedmont's
17 customer base in South Carolina has been growing while its usage per
18 customer has been declining. Due to improvements in appliance
19 efficiency, better insulated homes, past DSM programs, ongoing
20 customer conservation efforts, and other factors, Piedmont (and other
21 natural gas companies in the United States) has experienced a significant
22 reduction in average per customer usage in the last seven years using the
23 cleanest and most-efficient fossil fuel available.

PNG South Carolina Normalized Residential Consumption vs Number of Customers



By way of contrast, Duke has experienced both an expanding customer base and increasing usage per customer during this same period using less efficient and higher emitting sources of energy. Add to this the fact that incremental expansion of gas delivery facilities is less expensive than the costs of constructing additional electric generation and associated transmission facilities, and the relative premium on electric efficiency programs versus gas efficiency programs is apparent. In other words, natural gas customers are already reaping the savings and efficiency benefits of conservation (and have been for some time) whereas electric customers have not reaped those benefits and are faced with substantially increasing costs from the need to construct additional generation capacity

1 to meet growing electric demand – which ironically will also increase
2 costs to gas customers because of the “dash to gas” for power generation
3 needs.

4 **Q. What do you conclude from these facts?**

5 A. That the notion that electric and gas efficiency programs are equivalent
6 products with equivalent consequences in today’s energy markets is not a
7 valid point of view. Put simply, the answer to subsidized electric
8 inefficiency is not the adoption of competing natural gas programs. The
9 solution is to prevent the electric programs from subsidizing inefficiency
10 in the first place.

11 **Q. Do you have any comments on Mr. Schultz’ rebuttal testimony?**

12 A. Yes. He appears to say that even though fuel switching is a possible
13 result of Duke’s Save-A-Watt programs, Duke is not subsidizing the
14 initial cost of the basic appliance, such as a furnace or heat pump. If I
15 understand him correctly, he is simply saying that Duke is not proposing
16 to subsidize the installation of “low-efficiency” electric appliances. Duke
17 does, however, propose to subsidize the installation of other “higher
18 efficiency” electric appliances. The salient point from Piedmont’s
19 perspective, however, is that on a total fuel cycle efficiency/total cost
20 basis and considering the impact of GHG emissions, where incremental
21 electric load is being generated through new gas-fired combustion
22 turbines, virtually all electric appliances serving space or water heating
23 load are “lower efficiency” (and higher emitting) than the direct use of
24 natural gas to serve the same needs.

1 **Q. What do you say to Mr. Schultz's statement that "customers should**
2 **be offered a choice and that choice should promote more efficient use**
3 **of electric and gas"?**

4 A. I agree with that statement, I just don't agree that the customer's choice
5 should be artificially influenced by economic subsidies (whether funded
6 by Duke's South Carolina electric ratepayers or Duke itself) designed to
7 make such customers choose electricity when gas would be a better
8 choice from a total efficiency and GHG emissions perspective.

9 **Q. Do you have any closing thoughts on Duke's Save-A-Watt programs**
10 **and the defense of those programs offered by Duke in the face of**
11 **Piedmont's concerns?**

12 A. Yes. As was indicated in both my direct testimony and that of Mr.
13 Skains, Piedmont supports Duke's stated objectives of enhanced energy
14 efficiency and the avoidance of future costly power plant construction.
15 The efficient use of energy and avoidance of power plant capital costs are
16 a critical issue that impacts all South Carolina energy consumers. While
17 the Save-A-Watt filing is an innovative attempt to provide incentives for
18 Duke to avoid incremental and substantial new power plant costs,
19 Piedmont is disturbed by the fact that Duke will not recognize, or even
20 consider, any alternative energy applications that could directly reduce
21 their electric demand. Further, Duke appears to be attempting to use their
22 Save-A-Watt proposal to create subsidized competitive energy programs
23 that would build electric load rather than reduce it. While Duke
24 repeatedly refers to "energy" efficiency in their filing and testimony,
25 Duke's programs only address "electric" efficiency and no other energy

1 alternatives. This is a glaring and misleading omission. We would
2 recommend that the Commission (1) reject any programs under Duke's
3 Save-A-Watt proposal that could impact competitive markets and (2)
4 encourage Duke, Piedmont, the ORS, and any other interested party
5 identified by the Commission to work together in a collaborative effort to
6 truly achieve the stated "energy" efficiency and avoided cost objectives of
7 Save-A-Watt.

8 **Q. Do you have any further testimony?**

9 **A.** Not at this time.

EXHIBIT __ (FHY-1)

Gas Daily

Monday, January 28, 2008

Northeast prices plummet, but NYMEX rallies

THE MARKET

Matching its gains from the prior day, the February NYMEX gas futures contract rose 18.1 cents on Friday to settle at \$7.983/MMBtu. Cash prices pulled back in most regions, with some Northeast points plunging more than \$5.

A NYMEX analyst said traders were liquidating short positions ahead of the contract's expiration Tuesday. In addition, "we've got the background information of a large withdrawal this coming week," he said, noting that the Energy Information Administration is expected to report

(continued on page 2)

Report: Power generation straining gas supplies

The push to build gas-fired power plants over the past decade "has placed an unreasonable strain upon the US natural gas system," an analyst with Credit Suisse said last week.

"The lack of fuel diversity that occurred in the last development cycle means that natural gas must be used to meet new electricity load growth," Teri Viswanath said in a report. "This dynamic has contributed to higher prices and has constrained growth from other demand sectors."

When large-scale power plant development occurred in the late

(continued on page 6)

Analysts: LNG capacity may go unsubscribed

Though several North American liquefied natural gas import terminals will crank up this year, much of the new capacity may sit idle as demand for the fuel rises in other parts of the world, analysts said last week.

Hitting the market in 2008 will be four new US gasification terminals and one expanded facility, as well as two new terminals in Canada and Mexico. But "it looks like we're going to have a harder time attracting the gas," said James Diemer, executive vice president with Pace Global Energy. "We may be put in a situation where we're going to have

(continued on page 4)

Marcellus Shale may be 'play of choice' in 2008

Gas producers may have found the new frontier where they least expected it: a corner of the Appalachian Basin where the modern oil and gas industry got its start.

The Marcellus Shale — stretching from New York to West Virginia — could become the "shale play of choice in 2008" as companies continue to focus on exploring and exploiting unconventional onshore gas, Michael Hall, vice president of oil and gas equity research with Stifel Nicolaus, said last week.

The Marcellus is two to three times the size of the prolific Barnett

(continued on page 3)

Daily price survey (\$/MMBtu)

NATIONAL AVERAGE PRICE: 7.830

Trans. date: 1/25
Flow date(s): 1/26 -28

	Midpoint	Absolute	Common	Volume	Deals
Permian Basin Area					
El Paso, Permian Basin	7.310	7.23-7.45	7.26-7.37	659	101
Waha	7.410	7.35-7.50	7.37-7.45	592	95
Transwestern, Permian Basin	7.385	7.36-7.40	7.38-7.40	16	5

East Texas-North Louisiana Area

Carthage Hub	7.540	7.49-7.66	7.50-7.58	138	33
NGPL, Texok zone	7.435	7.15-7.65	7.31-7.56	430	78
Texas Eastern, ETX	7.405	7.35-7.64	7.35-7.48	19	7
Texas Gas, zone 1	7.755	7.72-7.92	7.72-7.81	147	26

East-Houston-Katy

Houston Ship Channel	7.610	7.57-7.74	7.57-7.65	180	27
Katy	7.610	7.51-7.85	7.53-7.70	1123	160

South-Corpus Christi

Agua Dulce Hub	7.635	7.57-7.70	7.60-7.67	206	10
NGPL, STX	7.605	7.55-7.72	7.56-7.65	73	14
Tennessee, zone 0	7.610	7.56-7.70	7.58-7.65	72	11
Texas Eastern, STX	7.650	7.60-7.80	7.60-7.70	111	21
Transco, zone 1	7.670	7.60-7.78	7.63-7.72	33	10

Louisiana-Onshore South

ANR, La.	7.770	7.69-7.92	7.71-7.83	219	45
Columbia Gulf, La.	7.785	7.72-8.00	7.72-7.86	231	33
Columbia Gulf, mainline	7.770	7.73-8.00	7.73-7.84	404	71
Florida Gas, zone 1	7.745	7.65-7.94	7.67-7.82	76	18
Florida Gas, zone 2	7.970	7.76-8.05	7.90-8.04	66	12
Florida Gas, zone 3	8.280	8.20-8.45	8.22-8.34	132	11
Henry Hub	7.800	7.71-7.97	7.74-7.87	732	114
NGPL, La.	7.520	7.52-7.52	7.52-7.52	1	1
Southern Natural, La.	7.970	7.85-8.20	7.88-8.06	276	49
Tennessee, La., 500 Leg	7.855	7.72-8.13	7.75-7.96	758	117
Tennessee, La., 800 Leg	7.795	7.70-7.94	7.74-7.86	315	58
Texas Eastern, WLA	7.835	7.73-8.05	7.76-7.92	268	52
Texas Eastern, ELA	7.990	7.84-8.30	7.88-8.11	183	47
Texas Gas, zone SL	7.790	7.75-7.95	7.75-7.84	70	22
Transco, zone 2	7.840	7.70-8.05	7.75-7.93	162	28
Transco, zone 3	8.025	7.92-8.30	7.93-8.12	569	94
Trunkline, WLA	7.780	7.70-8.01	7.70-7.86	117	26
Trunkline, ELA	7.745	7.70-7.85	7.71-7.78	86	26

Oklahoma

ANR, Okla.	7.335	7.30-7.40	7.31-7.36	84	18
CenterPoint, East	7.210	7.18-7.27	7.19-7.23	116	22
NGPL, Midcontinent	7.290	7.22-7.40	7.25-7.34	425	80
Oneok, Okla.	7.275	7.25-7.30	7.26-7.29	42	10
Panhandle, Tx.-Okla.	7.330	7.28-7.40	7.30-7.36	244	46
Southern Star, Tx.-Okla.-Kan.	7.370	7.34-7.40	7.36-7.39	40	9

New Mexico-San Juan Basin

El Paso, Bondad	7.320	7.29-7.34	7.31-7.33	84	15
El Paso, San Juan Basin	7.345	7.24-7.50	7.28-7.41	281	51

Northeast prices fall more than \$5 ... from page 1

a pull above 200 Bcf for the week ending January 25.

A New York-based broker said Monday's action will determine whether the gas futures market continues to trend higher or resumes its downward trek from earlier in the week. "We did stay below resistance at the 10-day moving average [Friday], and that says to me we could be putting in a topping formation," he said. "We'll just have to wait and see."

In the spot market, Northeast prices plummeted on expectations of milder weather and light weekend demand. Some points weakened as the session wore on while others gained ground through the morning. "There were buyers who waited and got caught with their pants down," one trader remarked.

Tennessee Gas Pipeline's zone 6 started the day in the mid-\$9.50s and topped out above \$10 — but still averaged more than \$5 below Thursday's levels. Transcontinental Gas Pipe Line's zone 6-New York also sank about \$5 to settle around \$9.35 — its first sub-\$10 average in more than a week.

The Algonquin Gas Transmission city-gates traded in a 50-cent range, but activity fizzled out as prices hit their lows by 9:15 am CST. The point lost about \$5.50 on the day.

Gulf Coast prices weakened on light weekend demand, but gained strength late in the session as the February NYMEX pushed higher.

"Month-end balancing added a little extra late demand that people weren't counting on," one trader observed.

Prices at the Henry Hub dropped around a nickel, while Transco zone 3 prices dropped more than a dime. Southern Natural Gas notified shippers Friday that the previously scheduled type 6 operational flow order effective at the start of Saturday's gas day had been cancelled. As a result, prices at Southern Natural shaved off as much as 75 cents.

'Deep freeze' in Alberta fails to bolster cash

Northwest prices generally inched lower even as portions of western Canada prepared for a "deep freeze" over the weekend, one trader said. Temperatures in the Calgary area were expected to be well below normal through Monday, but AECO-NIT in Alberta didn't gain any ground, thanks in part to modest eastbound shipments.

Westcoast Energy's station 2 opened the morning in the low C\$7.10s but fell quickly as traders opted not to purchase in light of the pipeline's high linepack notice. "People were definitely motivated to get some volume off," a trader said.

But as sellers unwound their positions and prices began to fall, buyers jumped back into the fray late in the session to take advantage of sub-C\$7 prices, he added.

In the Rockies, Kern River Gas Transmission at the Opal, Wyoming, plant dropped about 15 cents and volumes at the point fell precipitously from Thursday, traders said.

But the Pacific Gas and Electric city-gate climbed 10 cents even as volumes declined and traders turned their attention to bidweek. "Everything is kind of flat — there was not a lot to look at," one California trader said. "I think people are still hedging their bets on how cold it's going to be."

Malin, Oregon, slid a few cents, and transport from AECO to Malin "gave us about 20 cents to work with," the trader noted.

Farther south, bids outnumbered offers 3-to-1 at Southern California Gas as buyers secured supply ahead of a chilly weekend, but prices fell

Daily price survey (\$/MMBtu)

Trans. date: 1/25
Flow date(s): 1/26-28

	Midpoint	Absolute	Common	Volume	Deals
Rockies					
CIG, Rocky Mountains	7.190	7.11-7.21	7.17-7.21	10	5
Kern River, Opal plant	7.200	7.17-7.28	7.17-7.23	145	30
Stanfield, Ore.	7.500	7.47-7.52	7.49-7.51	95	18
Questar, Rocky Mountains	7.160	7.10-7.20	7.14-7.19	50	9
Cheyenne Hub	7.250	7.22-7.29	7.23-7.27	56	13
Northwest, Wyo. Pool	7.170	7.17-7.17	7.17-7.17	20	5
Northwest, s. of Green River	7.100	7.09-7.12	7.09-7.11	8	3

Canadian Gas

Iroquois, receipts	8.485	8.40-8.60	8.44-8.54	235	38
Niagara	8.315	8.24-8.47	8.26-8.37	248	33
Northwest, Can. bdr. (Sumas)	8.580	8.50-8.65	8.54-8.62	364	66
TCPL Alberta, AECO-C*	C6.815	C6.77-6.94	C6.77-6.86	2190	185
Emerson, Viking GL	7.695	7.66-7.90	7.66-7.76	650	57
Dawn, Ontario	8.075	8.00-8.25	8.01-8.14	1481	160
GTN, Kingsgate	7.415	7.39-7.43	7.41-7.43	56	9
Westcoast, station 2*	C6.980	C6.80-7.20	C6.88-7.08	210	40

Appalachia

Dominion, North Point	8.200	8.15-8.23	8.18-8.22	30	8
Dominion, South Point	8.110	8.05-8.30	8.05-8.17	612	114
Leidy Hub	8.450	8.35-8.50	8.41-8.49	84	12
Columbia Gas, Appalachia	8.045	7.99-8.11	8.02-8.08	462	91

Mississippi-Alabama

Texas Eastern, M-1 (Kosi)	7.980	7.85-8.17	7.90-8.06	87	21
Transco, zone 4	8.405	8.25-8.70	8.29-8.52	43	13

Others

Algonquin, receipts	9.975	9.74-10.10	9.89-10.07	32	7
SoCal Gas	7.570	7.50-7.65	7.53-7.61	1023	129
PG&E, South	7.635	7.56-7.65	7.61-7.65	97	11
PG&E, Malin	7.550	7.52-7.60	7.53-7.57	268	46
Alliance, into interstates	7.865	7.80-8.00	7.82-7.92	137	21
ANR, ML 7	8.015	7.95-8.20	7.95-8.08	17	13
NGPL, Amarillo receipt	7.395	7.33-7.45	7.37-7.43	75	15
Northern, Ventura	7.630	7.55-7.78	7.57-7.69	450	69
Northern, demarc	7.615	7.55-7.68	7.58-7.65	253	54
Dracut, Mass.	9.575	9.50-10.20	9.50-9.75	133	19

Citygates

Chicago city-gates	7.800	7.71-7.95	7.74-7.86	1009	169
Consumers Energy city-gate	7.960	7.89-8.12	7.90-8.02	260	44
Mich Con city-gate	7.950	7.79-8.11	7.87-8.03	401	87
PG&E city-gate	7.880	7.80-7.94	7.85-7.92	375	51
Florida city-gates	8.430	8.01-8.55	8.30-8.55	71	8
Algonquin, city-gates	10.195	10.00-10.50	10.07-10.32	279	52
Tennessee, zone 6 delivered	9.865	9.55-10.10	9.73-10.00	154	44
Iroquois, zone 2	9.845	9.50-10.15	9.68-10.01	360	66
Texas Eastern, M-3	8.745	8.55-9.00	8.63-8.86	499	103
Transco, zone 5 delivered	8.720	8.40-9.00	8.57-8.87	194	36
Transco, zone 6 non-N.Y.	9.045	8.55-9.50	8.81-9.28	384	84
Transco, zone 6 N.Y.	9.335	9.05-10.00	9.10-9.57	417	70
Kern River, delivered	7.605	7.54-7.65	7.58-7.63	202	37

*NOTE: Price in C\$ per g; C\$1=US\$0.9956
Volume in 000 MMBtu/day

Market coverage

More information about Platts natural gas market coverage, including explanations of methodology and descriptions of delivery points, is available at [www.platts.com/NaturalGas/Resources/Methodology & Specifications/](http://www.platts.com/NaturalGas/Resources/Methodology&Specifications/).

Questions may also be directed to our market editors: Tom Castleman, (713) 658-3263, tom_castleman@platts.com and Liane Kucher, (202) 383-2147, liane_kucher@platts.com.

about a nickel nevertheless. El Paso Natural Gas in the San Juan Basin slid twice as much as the pipeline cancelled its strained operating condition on the specter of normal lineup.

Prices in the upper Midwest rose during trading as traders entered the market to obtain last-minute weekend supplies. "There were a lot of buyers, but the price is still too high," one trader said. "[Saturday] there's still some demand, but Monday it's going to warm up again."

Dawn, Ontario, widened its premium to the Chicago city-gates to more than a dime as Dawn climbed more than a dime and Chicago fell about 5 cents.

Shippers with supply may have also profited by moving gas to the Midcontinent given the expanding differential between Natural Gas Pipeline Co. of America's Midcontinent zone and Chicago, which opened to nearly 55 cents.

At about 7 am CST, plenty of Midcontinent supply was available, one trader said, noting that things tightened up about an hour later. "We were really cold this week. Everyone is buying to get back in balance."

Panhandle Eastern Pipe Line widened its premium to the Cheyenne Hub to more than 5-cents, even though Panhandle fell nearly 15 cents. — Market Staff Reports

Producers flock to Marcellus Shale ... from page 1

Shale of North Texas, and the heart of the play is located in western Pennsylvania where the first modern oil well — the Drake — was drilled. Recently, Hall boosted his 2008 production estimates out of the Appalachian Basin to 120,100 Mcf/d from 116,100 Mcf/d, largely due to the Marcellus' new-found potential.

Hall said E&Ps have been active in the Marcellus for some time, but only recently have they been able to apply technologies commonly used in drilling traditional shales, such as the Barnett and Woodford shales, to Appalachia.

"Applying those completion techniques to the Marcellus has emerged over the last year," Hall said. And noting the basin is "extra large" and could hold "significant potential," he predicted production could ramp up dramatically over the next couple of years.

Tudor Pickering Holt analysts estimated that horizontal wells in the Marcellus are generating 20% return with gas prices at \$7/Mcf. A "good" well there will recover around 2 Bcf equivalent, with initial production averaging over 3,000 Mcf/d at a cost of around \$3 million/well the firm estimated.

"Who'd have thought that Pennsylvania would be a hot area?" Tudor Pickering analysts said.

Range Resources, which has held a stake in the Marcellus Shale since 2004, is one of the main companies involved in the play, according to analysts. Range management believes the Marcellus could provide 2 Tcfe to 5 Tcfe of reserves on around 500,000 net acres.

"We've been extra-active for the last two years and especially in 2007," said Rodney Waller, senior vice president and secretary of Range. "We probably have 60 to 80 vertical wells and 15 horizontal wells, while our next competitor is working on its first horizontal well and five to 10 vertical wells."

Most wells drilled in the Appalachian Basin, Waller said, boast a long reserve life but not as much initial production. In the Marcellus, initial production starts off strong at around 3,000 Mcf/d to 4,000 Mcf/d per well, which is "significantly better than a lot of other plays in Appalachia."

Analysts have said initial production rates out of the Marcellus are close to the initial production of some wells in the Barnett. But in terms of carbon content and thermal maturity of the shale, the Marcellus "compares very favorably" to the Fayetteville Shale in Arkansas, "and maybe even better," Waller said.

Although private companies have traditionally dominated the Appalachian

Weekly weighted average prices

	01/12-18 2007	01/19-25 2007	-/+
Permian Basin Area			
El Paso, Permian Basin	7.64	7.90	+26
Waha	7.72	7.92	+20
Transwestern, Permian Basin	7.60	7.91	+30
East Texas-North Louisiana Area			
Carthage Hub	7.91	7.97	+6
NGPL, Texok zone	7.81	7.83	+2
Texas Eastern, ETX	7.94	8.10	+16
Texas Gas, zone 1	8.18	8.16	-2
East-Houston-Katy			
Houston Ship Channel	7.98	7.94	-4
Katy	8.00	7.97	-3
South-Corpus Christi			
Agua Dulce Hub	8.02	7.92	-10
NGPL, STX	7.99	7.93	-6
Tennessee, zone 0	8.00	7.87	-13
Texas Eastern, STX	8.03	7.94	-8
Transco, zone 1	7.95	8.01	+6
Louisiana-Onshore South			
ANR, La.	8.17	8.19	+2
Columbia Gulf, La.	8.19	8.20	+2
Columbia Gulf, mainline	8.20	8.20	+1
Florida Gas, zone 1	8.13	8.20	+7
Florida Gas, zone 2	8.27	8.24	-3
Florida Gas, zone 3	8.55	9.32	+77
Henry Hub	8.22	8.22	+0
NGPL, La.	8.01	8.10	+9
Southern Natural, La.	8.38	9.25	+87
Tennessee, La., 500 Leg	8.21	8.45	+24
Tennessee, La., 800 Leg	8.18	8.19	+1
Texas Eastern, WLA	8.23	8.19	-5
Texas Eastern, ELA	8.30	8.52	+22
Texas Gas, zone SL	8.22	8.15	-8
Transco, zone 2	8.23	8.31	+8
Transco, zone 3	8.41	8.96	+55
Trunkline, WLA	8.21	8.21	+0
Trunkline, ELA	8.20	8.18	-2
Oklahoma			
ANR, Okla.	7.62	8.01	+39
CenterPoint, East	7.75	7.99	+24
NGPL, Midcontinent	7.59	7.88	+29
Oneok, Okla.	7.77	7.87	+10
Panhandle, Tx.-Okla.	7.57	7.96	+39
Southern Star, Tx.-Okla.-Kan.	7.47	7.88	+41
New Mexico-San Juan Basin			
El Paso, Bondad	7.55	7.69	+14
El Paso, San Juan Basin	7.58	7.77	+19
Rockies			
CIQ, Rocky Mountains	7.49	7.80	+31
Kern River, Opal plant	7.50	7.93	+43
Stanfield, Ore.	7.72	7.83	+11
Questar, Rocky Mountains	7.57	7.78	+21
Cheyenne Hub	7.60	7.92	+31
Northwest, Wyo. Pool	7.40	7.95	+56
Northwest, s. of Green River	7.31	7.64	+34
Canadian Gas			
Iroquois, receipts	8.75	8.89	+14
Niagara	8.64	8.73	+8
Northwest, Can. bdr. (Sumas)	8.22	8.66	+44
TCPL Alberta, AECO-C*	C7.13	C7.07	C-5
Emerson, Viking GL	7.93	7.80	-13
Dawn, Ontario	8.40	8.25	-14
GTN, Kingsgate	7.62	7.62	+1
Westcoast, station 2*	C7.14	C7.44	C+30
Appalachia			
Dominion, North Point	8.60	8.95	+35
Dominion, South Point	8.54	8.80	+26
Leidy Hub	8.86	9.47	+61
Columbia Gas, Appalachia	8.41	8.48	+7

Basin, Hall said publicly traded independents hold the acreage advantage in the Marcellus.

Hall said Chesapeake Energy is the largest overall leaseholder in the Appalachian Basin with about 3.8 million net acres and 3.4 Tcfe of proved undeveloped reserves. Currently, the company is in the process of drilling both horizontal and vertical wells in the Marcellus.

Waller also cited emerging competition in the play from entities such as Southwestern Energy, Cabot Oil & Gas and EOG Resources, among others. "Over the last six months, there's been a huge influx of people," he said. Leasing costs in the Marcellus "are rising, but still very reasonable."

Moreover, the Marcellus covers a large expanse of the Appalachian Basin, thus allowing for a greater degree of competition among players.

"This is the first shale play I've seen that is being developed along a 15- to 20-county area," Waller said. By comparison, companies in Southeastern shale plays have "started out in one area and moved out from the epicenter."

Waller said the availability of takeaway pipeline capacity and a strong price premium of 30 cents to 50 cents/MMBtu above Henry Hub have underpinned the Marcellus' attractiveness.

However, drilling services equipment may be a problem. Such equipment in the Appalachian Basin is currently "geared to a very shallow environment and geological setting," Waller said, while Marcellus wells drill at a greater depth between 6,000 and 8,000 feet.

As a result, companies have had to import rigs and equipment from the southwestern and western US.

At the same time, Appalachian producers have "never had the oil service [cost] inflation that you have in the Barnett," Waller said. "We've always been a bit behind that. And as other competitors bring their services up ... it will bring more and more facilities and crews and equipment up, which could lower the costs we have."

JMM

Power demand straining gas supplies ... from page 1

to attract it [via price] rather than being the summer sponge, because of the demand dynamic in other parts of the world."

Diemer said it is possible Europe will siphon away a considerable amount of LNG over the summer — typically the peak storage injection season in the US. He explained that a scarcity of coal supplies and tough carbon constraints could lead European power generators to rely more heavily on gas.

Furthermore, he and other analysts predicted that hydro capacity in Spain this summer could be constrained as a result of a fairly dry winter. And in Asia, the ongoing outage of a major nuclear reactor could make Japan a more predominant buyer of LNG during the summer months, analysts said.

"It's starting to look like we could see a down year for spot cargo and supply availability as this initial handful of land-based new terminals start up," agreed Lee Van Atta, senior director with R.W. Beck.

Meanwhile, Bank of America analyst Robert Morris reduced his full-year LNG import estimates to an average of 2.5 Bcf/d for 2008, compared with his previous estimate of 2.7 Bcf/d and last year's average import rate of 2.1 Bcf/d. Besides issues in Europe and Asia, he pointed to operational issues at several gas fields and liquefaction plants in Norway and Nigeria as potentially slowing global capacity.

Of the new LNG terminals and expansions coming online in 2008, those centered in the Northeast may face the biggest difficulties in securing supply in a heavily gas-reliant region, analysts said.

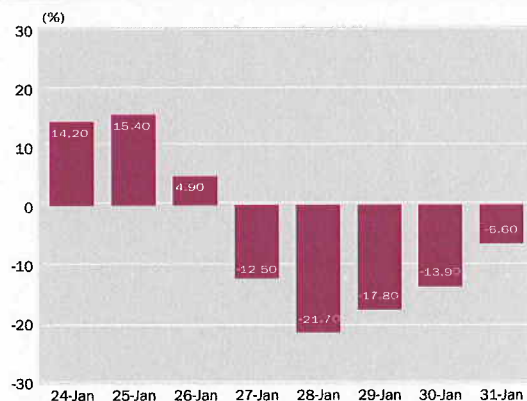
The Northeast Gateway Energy Bridge, Excelerate Energy's recently completed facility off the Massachusetts coast, will deliver an average of 400,000 Mcf/d of incremental capacity to New England gas markets via the Algonquin Gas

Weekly weighted average prices

	01/12-18 2007	01/19-25 2007	-/+
Mississippi-Alabama			
Texas Eastern, M-1 (Kosi)	8.41	8.56	+15
Transco, zone 4	8.54	9.54	+100
Others			
Algonquin, receipts	9.23	15.08	+585
SoCal Gas	7.77	7.86	+9
PG&E, South	7.78	7.96	+18
PG&E, Malin	7.76	7.83	+6
Alliance, into interstates	8.24	8.56	+32
ANR, ML 7	8.38	8.55	+17
NGPL, Amarillo receipt	7.69	8.12	+43
Northern, Ventura	8.15	9.07	+92
Northern, demarc	7.94	8.36	+43
Dracut, Mass.	9.70	14.97	+528
City-gates			
Chicago city-gates	8.21	8.64	+43
Consumers Energy city-gate	8.35	8.32	-3
Mich Con city-gate	8.30	8.09	-22
PG&E city-gate	8.09	8.01	-9
Florida city-gates	8.47	9.03	+55
Algonquin, city-gates	10.05	16.22	+617
Tennessee, zone 6 delivered	9.29	14.71	+542
Iroquois, zone 2	9.88	17.31	+743
Texas Eastern, M-3	9.29	14.39	+510
Transco, zone 5 delivered	9.20	12.89	+369
Transco, zone 6 non-N.Y.	9.45	15.17	+572
Transco, zone 6 N.Y.	9.95	17.24	+730
Kern River, delivered	—	—	—

*NOTE: Price in C\$ per gal

Dominion's U.S. energy use forecast



This section of the Dominion Energy Index represents a national forecast for home heating and cooling requirements above or below normal with the baseline of 0 representing normal for that day based on historical data.

Source: Dominion

Platts Feature

EC climate change package

The European Commission on January 23 set out detailed proposals for meeting its target to cut greenhouse gas emissions by 20% by 2020, including new national targets for renewable energy, emissions reductions and reforms to the EU's Emissions Trading Scheme.

View this feature at www.platts.com/ElectricPower/Resources/NewsFeatures/ecclimate/index.xml

Transmission system. The facility has a peak sendout capacity of 800,000 Mcf/d.

Repsol and Irving Oil's Canaport LNG terminal, located in Saint John, New Brunswick, is set to begin operations in late 2008. It will be the first LNG terminal in Canada and will supply 1 Bcf/d of gas to Canadian and US markets via the Maritimes & Northeast Pipeline. As of December, the project was 65% complete.

By late 2008, Dominion Transmission will add another 800,000 Mcf/d to its existing 1 Bcf/d Cove Point LNG terminal in Maryland, along with two new storage tanks. But Van Atta believes Cove Point might have difficulty attracting LNG given cuts in deliveries from StatoilHydro's Snohvit offshore liquefaction facility, the vast majority of which is linked to Cove Point.

Likewise, the tight LNG spot market means Northeast Gateway may not see much business in 2008, Van Atta said. And Canaport "is filling in for what's been a very disappointing performance by Sable Island production," he said. This downturn in supply "opens up at least a couple hundred [Bcf/d] of need ... for Canaport to serve."

In the southeastern US, Cheniere Energy Partners' Sabine Pass LNG terminal on the Texas/Louisiana border should begin operations by the second quarter of 2008. The facility will have a maximum send-out of 2.6 Bcf/d, with another 1.4 Bcf/d expected to come online in 2009.

Also on tap for Texas, the Freeport LNG terminal on Quintana Island will have an initial send-out capacity of 1.75 Bcf/d in early 2008, with expansions bringing another 1.15 Bcf/d by 2009.

And in Louisiana, Semptra Energy's Cameron LNG terminal should begin operations later in the year, bringing online an initial 1.5 Bcf/d of send-out capacity. The project can accommodate an expansion to up to 2.65 Bcf/d.

Van Atta noted that a number of additional LNG facilities are on the table for construction in Texas, including planned facilities in Corpus Christi, Port Arthur and Port Lavaca. And at least five new LNG facilities are on the books for con-

Peabody, GreatPoint team up on coal gasification initiatives

St. Louis-based coal producer Peabody Energy on Friday said it will buy an undisclosed minority stake in GreatPoint Energy, a Cambridge, Massachusetts-based company that is working to commercialize a technology to convert coal, petroleum coke and biomass into pipeline-quality natural gas.

Peabody said it and GreatPoint will evaluate the potential for developing joint coal-gasification projects using Peabody reserves and land. Financial details of the agreement were not revealed.

Peabody said GreatPoint's single-stage catalytic gasification process can create gas that is 99.5% pure methane and can be transported throughout North America utilizing the existing gas pipeline grid.

The company is developing the technology for commercial-scale use for power generation, residential and commercial heating and production of chemicals and has completed testing in a pilot facility in Des Plaines, Illinois.

"Using GreatPoint Energy's technology to turn coal into natural gas while capturing carbon will provide a clean coal-based alternative to expensive natural gas imports, while using Peabody's industry-best reserve position," said Rick Bowen, Peabody's senior vice president of Btu conversion and strategic planning. JB

Baker Hughes Rig Count

Week ending	1/25/2008	1/18/2008	Chg.	1/26/2007
Total US rigs	1,747	1,732	+15	1,699
Total US gas rigs	1,422	1,401	+21	1,440
Total Canadian rigs	582	560	+22	664

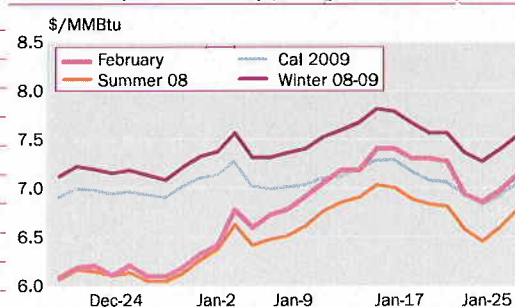
Platts-ICE Forward Curve — Natural Gas, Jan 25 (¢/MMBtu)

Prompt month: Feb 08

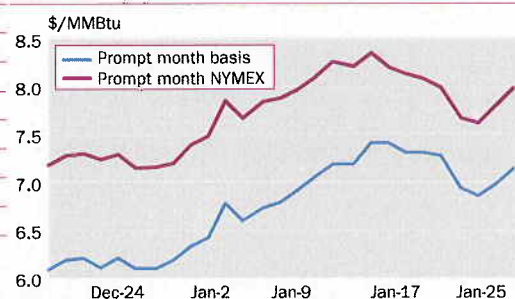
Algonquin city-gate	410.00
Transco Zone 6-NY	480.00
Texas Eastern, M-3	221.50
Columbia Gas, Appalachia	26.50
Transco, zone 3	30.50
Florida, zone 3	29.00
Trunkline, LA	-0.25
Houston Ship Channel	-23.75
Chicago city-gates	13.50
MichCon city-gate	12.00
Panhandle, Tx.-Okla.	-67.75
Waha	-47.75
El Paso, Permian Basin	-65.00
El Paso, San Juan Basin	-69.25
PG&E city-gate	-5.75
SoCal Gas	-35.00
Northwest Pipe, Rockies	-84.50
Northwest, Sumas	42.00
Dawn, Ontario	27.00
AECO, Alberta	-72.50

Summer season is April-October. Winter is November-March.

Northwest Pipe, Rockies: Key packages, last 30 days



Northwest Pipe, Rockies: Basis market vs NYMEX



Northwest Pipe, Rockies: Forward curve

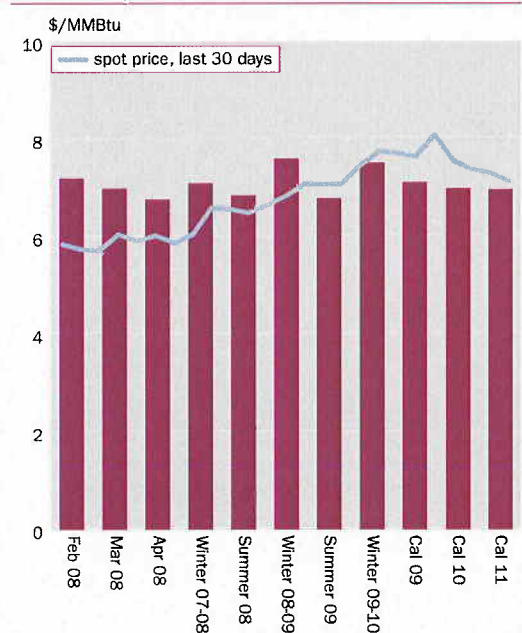


Table and graphs are created using Platts-ICE Forward Curve — Natural Gas (North America) data. Forward assessments as basis to the Henry Hub and full values are available for periods spanning three years. To see a sample and find information on how to subscribe to the full data set go to www.risk.platts.com. For more information on Platts services, please call +1-800-PLATTS8.

struction in Louisiana and Mississippi.

In 2009, the 2 Bcf/d Golden Pass LNG terminal, from Qatar Petroleum, ExxonMobil and ConocoPhillips, is expected to come online, and some believe it could be the busiest of all the Gulf Coast LNG terminals. "There's still a battle left to see if there's still room for another LNG terminal" in the Gulf Coast region, Van Atta noted.

The first LNG terminal on the West Coast, however, may face better prospects in US markets, analysts said.

Sempra's Energía Costa Azul LNG terminal in Baja California is slated to dispatch up to 1 Bcf/d to markets in Mexico later this year. Currently, Baja California obtains all its gas supplies from the US, and the Costa Azul terminal will offer a new supply alternative to both Mexico and gas-hungry California markets.

Overall, the US is in a good position to handle a prospective slowdown in LNG imports over the near term, Van Atta said, due to the success of onshore, unconventional production in areas such as the Barnett Shale.

On the other hand, Diemer cautioned that gas prices could shoot higher if the US does not attract similar volumes of LNG as it did in 2007. JMM

LNG import capacity may go unused ... from page 1

1990s, "it was commonly felt that we had entered a new era of natural gas use within the country," the analyst explained. However, "there was not a lot of thought given to the supply specifics on how the new growth in gas demand would be met."

Ultimately, "we simply couldn't afford the natural gas growth envisioned in the 1990s," Viswanath said.

And while demand levels have remained relatively stable since the power-generation boom, "the ability to continue to meet demand with domestic production has significantly eroded," leading to a tighter supply/demand balance and higher prices and triggering "significantly reduced industrial load and restricted growth" among residential customers, the report said.

Moreover, most of the gas-fired plants envisioned 10 years ago have been built, leading to a 10% increase in gas use by the sector while overall gas demand has remained flat. "Unfortunately, this unfettered demand growth appears to have come at the expense of other consumptive sectors," Viswanath said.

Because gas demand for electricity generation is very dependent on weather, the sector's growth has made overall demand much more weather-sensitive "and therefore more volatile," Viswanath noted.

Assuming normal weather, US gas consumption should rise by about 1.3 Bcf/d

Natural gas hub flow, Jan 25

Hub Name	Scheduled Flow	+/-	% Change	Daily Price	—31 Day Average— Flow Price
ANR, La.	726	-218	-23.09	7.795	823 7.703
Dracut, Mass.	413	-36	-8.08	14.940	308 10.401
Florida city-gates	1,591	-200	-11.16	8.810	1,572 8.310
Iroquois, receipts	1,171	9	0.76	8.470	1,077 8.412
Kern River, Opal plant	1,442	66	4.80	7.355	1,464 6.970
Niagara	809	-39	-4.63	8.370	763 8.283
Northern, Ventura	988	-257	-20.65	7.735	923 7.833
Northern, demarc	1,835	-93	-4.85	7.730	1,834 7.599
Northwest, Can. bdr. (Sumas)	977	31	3.29	8.785	775 7.871
PG&E, Malin	1,001	-35	-3.40	7.580	1,022 7.413
Stanfield, Ore.	383	-87	-18.55	7.495	387 7.340
Transco, zone 3	2,422	-52	-2.12	8.140	2,383 8.044
Transco, zone 6 N.Y.	1,981	57	2.94	14.440	1,743 12.146

Volumes in 000 MMBtu; prices in \$/MMBtu. For more information, contact Bill Murphy at 720-548-5485.

Source: Platts Energy Advantage

NYMEX Henry Hub gas futures contract, Jan 25

	Settlement	High	Low	+/-	Volume
Feb 2008	7.983	7.985	7.825	+18.1	48880
Mar 2008	7.954	7.925	7.830	+17.1	33754
Apr 2008	7.929	7.905	7.820	+16.1	16339
May 2008	7.975	7.915	7.885	+15.5	5807
Jun 2008	8.057	7.975	7.975	+15.5	1199
Jul 2008	8.140	8.060	8.060	+15.5	746
Aug 2008	8.210	8.170	8.130	+15.5	777
Sep 2008	8.222	8.135	8.135	+15.5	515
Oct 2008	8.300	8.215	8.215	+15.5	3509
Nov 2008	8.545	8.545	8.545	+15.2	1064
Dec 2008	8.810	8.740	8.740	+13.9	1375
Jan 2009	9.020	9.020	9.020	+13.0	1762
Feb 2009	9.025	8.950	8.950	+13.0	66
Mar 2009	8.810	8.810	8.810	+13.5	2346
Apr 2009	8.070	8.070	8.070	+12.5	1136
May 2009	8.059	8.059	8.059	+12.5	1810
Jun 2009	8.124	8.124	8.124	+12.3	17
Jul 2009	8.189	8.100	8.100	+12.0	3
Aug 2009	8.246	8.150	8.150	+12.2	25
Sep 2009	8.256	8.256	8.256	+12.3	28
Oct 2009	8.316	8.316	8.316	+12.4	1536
Nov 2009	8.516	8.516	8.516	+11.9	15
Dec 2009	8.751	8.751	8.751	+10.9	569
Jan 2010	8.941	8.941	8.941	+10.4	569
Feb 2010	8.946	8.946	8.946	+10.4	16
Mar 2010	8.721	8.721	8.721	+10.4	437
Apr 2010	7.961	7.961	7.961	+9.9	37
May 2010	7.946	7.946	7.946	+9.9	36
Jun 2010	8.006	8.006	8.006	+9.9	13
Jul 2010	8.066	8.066	8.066	+9.9	19
Aug 2010	8.116	8.116	8.116	+9.9	12
Sep 2010	8.126	8.126	8.126	+9.9	8
Oct 2010	8.181	8.181	8.181	+9.9	13
Nov 2010	8.376	8.376	8.376	+9.4	0
Dec 2010	8.611	8.066	8.066	+8.9	1
Jan 2011	—	—	—	—	—

Contract data for Thursday

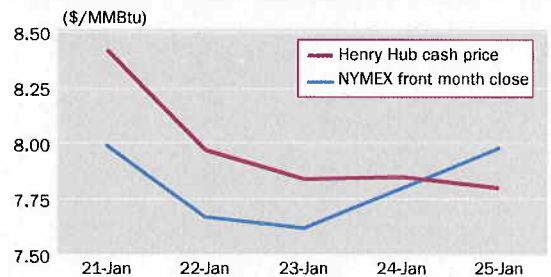
Volume of contracts traded: 124,065

Front-months open interest:

FEB: 40,450 ; MAR: 158,600; APR: 74,437

Total open interest: 899,544

Henry Hub/NYMEX spread



Platts oil prices, Jan 25

	(\$/b)	(\$/MMBtu)
Gulf Coast spot		
1% Resid	72.00-72.20	11.47
3% Resid	68.85-68.95	10.96
Crude spot		
WTI (Jan)	90.36-90.38	15.51
New York spot		
No.2	105.38-105.49	18.10
0.3% Resid HP	84.05-84.25	13.38
0.3% Resid LP	88.40-88.60	14.08
0.7% Resid	74.00-74.20	11.79
1% Resid HP	72.85-73.05	11.60

this year, placing even more pressure on domestic production and imports to keep up, the analyst predicted. Near-normal weather should increase both air-conditioning load and space-heating demand, while several coal-fired plants — amounting to around 20,000 MW — are expected to have extended outages for installation of environmental control equipment this year.

The electricity sector alone should see gas demand grow by 700,000 Mcf/d in 2008 to an average of 18.6 Bcf/d, a 3.8% increase over last year, the analyst said.

Meanwhile, demand in the industrial sector should grow by around 245,000 Mcf/d to about 18.2 Bcf/d, while commercial and residential demand should grow by 350,000 Mcf/d to around 21.7 Bcf/d. However, without a “significant correction” in gas prices, demand growth in the commercial/residential segment should remain fairly static, according to the report.

Concerns about greenhouse gas emissions resulted in around 40% of the 150 new coal-fired power plants announced over the last five years being canceled in 2007, Viswanath noted. Those cancellations “will largely translate to the increased development of gas-fired power plants to ensure reliability,” and it remains to be seen “whether we can afford another boom in gas-fired generation.” MT

BP to spend less than planned in Alaska due to tax increase

BP said Friday it will trim its 2008 capital spending budget for Alaska by \$100 million and delay a \$1 billion oil development project on Prudhoe Bay in response to new taxes imposed by the state.

Doug Suttles, president of BP Exploration Alaska, told a group of energy contractors that it will spend \$800 million in Alaska next year, up 17% from 2007 levels but \$100 million less than originally planned.

The company is concerned about the impact of a law implemented in December that essentially doubled production tax rates on the industry, resulting in taxes that exceed 50% of producers' net profits in some cases (GD 1/17).

ConocoPhillips Alaska, another North Slope producer, said earlier this month that it was reviewing its 2008 capital budget and may reduce spending in Alaska. TB

platts Gas Daily

Volume 25 / Issue 18 / Monday, January 28, 2008

ISSN: 0885-5935

Editorial Director, U.S. Gas News
Mark Davidson, 202-383-2148
mark_davidson@platts.com

Senior Editor
Stephanie Gott Seay
865-690-4319

Associate Editors
Jim Magill, 713-658-3229
Rodney A. White, 202-383-2143
Melanie Tatum, 212-904-4174
Bill Holland, 202-383-2286

Vice President, Editorial
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Ann Forte

Contributing Editors
Jessica M. Marron, Tim Bradner,
Jeff Barber

Markets Editor
Tom Castleman, 713-658-3263
tom_castleman@platts.com

Associate Markets Editors
Sheetal Nasta, 713-658-3203
Bronwen Taylor, 713-658-3265
Amy Sollers, 713-658-3266
Samantha Santa Maria, 713-658-3271
Bridget Brown, 713-658-3254

Manager, Houston gas market reporting
Michael Rieke

Editorial Director, Market Reporting
Brian Jordan

Global Editorial Director, Power
Larry Foster

Gas Daily is published daily by Platts, a division of The McGraw-Hill Companies. Registered office Two Penn Plaza, 25th Floor, New York, NY 10121-2298

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To reach Platts

E-mail: support@platts.com

North America
Tel: 800-PLATTS-8 (toll-free)
+1-212-904-3070 (direct)

Latin America
Tel: + 54-11-4804-1890

Europe & Middle East
Tel: +44-20-7176-6111

Asia Pacific
Tel: +65-6530-6430

Advertising
Tel: +1-720-548-5479

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RETAIL REPORT ... a weekly supplement to *Gas Daily*

Faulty gas lines now a political hot potato in Texas

Last year's furor over faulty gas compression couplings in North Texas has become a hot-button issue this year for candidates running for a seat on the Texas Railroad Commission, the agency that regulates local distribution companies in rural areas.

Of the three Democrats running in the March 4 primary election, Mark Thompson has been the most vocal on the issue, insisting the current commission reacted too slowly to the problem that resulted in two fatal house explosions.

"The couplings should have been replaced more than 20 years ago," the physical therapist said in a recent interview broadcast on the Internet. He complained that his efforts to find out more about the couplings from TRC staff were often stymied.

Thompson acknowledged that the TRC's policy has changed, although the commission has not decided if LDCs or customers or both will pay the costs of change. "It may cost a lot," Thompson said. "But you shouldn't have to worry about waking up and maybe your house has exploded or something like that."

Commission records show that failed couplings caused two deadly explosions in 2006 and 2007 in Atmos Energy's North Texas service territory. The TRC subsequently ordered a "targeted inquiry" into the suitability of those types of couplings, which generally were installed before the 1980s.

On October 9, the TRC issued an interim order directing all gas utilities to repair leaks of compression couplings they came across during their normal business operations. A month later, it ordered LDCs to replace all known compression-style gas line couplings on their systems that are not manufactured with secondary restraints or are susceptible to coming loose from their fittings (*GD 11/12*).

Candidate says TRC 'did nothing' to prevent deaths

Candidate Dale Henry, a retired city manager and petroleum engineer, said on his web site that the TRC has failed to make sure the couplings are safe. "More than half a dozen people have died across Texas as a result of faulty gas couplings under or near their homes. The Texas Railroad Commission knew these couplings were faulty more than a decade ago, and did nothing."

Henry said that as a TRC commissioner he would move swiftly to force LDCs "to take action like replacing faulty gas couplings."

Art Hall, another candidate, agrees that more needs to be done but said "one of the larger issues is the costs to upgrade the couplings. Those are balances the commission has to face."

"I am also hearing that even though there is a cost to utilities, it is my understanding they can increase their rates to get some of that money back," said Hall, a lawyer and an investment banker. "That may be an issue for ratepayers across the state." He added that he would be "very cautious" about asking utility customers to foot the bill.

TRC Chairman Michael Williams, a Republican who currently holds the seat up for election, said in a recent podcast that the commission and its staff "take very seriously their responsibility for pipeline safety" and he "responded in very quick order" to the incidents.

Williams, who doesn't face a GOP challenger in the primary, said he fought hard for the October order that mandated the increase in the frequency of leak repairs. "One of the best ways to prevent an accident is to make sure the utilities are reviewing and inspecting their systems on a regular basis."

"The Railroad Commission has set the standard for pipeline safety in the US for decades," he maintained. "This directive will ensure we continue this high threshold of safety for our citizens."

RAW

Gas theft costs Ohio utility more than \$1 million a year

Instances of gas theft continued to rise last year for Columbia Gas of Ohio, placing a costly burden on the utility and its paying customers, said Pete Kilpa, director of revenue recovery for parent company NiSource.

While the number of actual thefts rose 4%, the dollar amount of the gas stolen was down 25% from 2006 levels. "This is comparable to the drop in natural gas prices," Kilpa said in an interview last week. Meanwhile, "our system is catching more thieves, we're getting to them sooner."

Columbia Gas has an average of 1,400 gas theft cases per year, which ultimately costs its customers almost \$1.2 million annually, the company said last week in a report. The value of the average theft is more than \$800 — enough to heat a typical home for eight months.

The techniques used for stealing gas across the US are as varied as the malefactors, according to a recent presentation by the Energy Association of Pennsylvania's Revenue Protection Task Force. Some people go to the expense of building a hidden bypass around a meter, while others have been known to drill a hole in the meter and jam its dials. One thief tilted his meter so it wouldn't register gas passing through it.

NiSource has a revenue protection division that focuses on identifying, investigating, and, if necessary, prosecuting offenders, Kilpa said.

The public's outcry about people stealing gas has not been "what we had hoped or expected," Kilpa said, noting that some state regulators don't allow utilities to take as aggressive steps as necessary to curtail the problem. "The rules paint you into a corner."

Gas theft is a subset of a larger issue: people who can't or don't pay their bills, Kilpa said. "In all of our jurisdictions, we are pushing the message, 'If you can't pay your bill, work with us.' We have lots of programs. If you are eligible for public assistance, you certainly should be taking advantage of that."

For example, "we try to give customers lots of options to avoid disconnection in the winter or any other time, but some customers chose not to do that," Kilpa said. "They don't act and they may get shut off."

He estimated that 90% of the people caught stealing gas "have been shut off and have taken matters into their own hands. This is a serious safety issue as well as a financial issue."

RAW

Canadian Enerdata gas storage survey, Jan 11

(In Bcf)	East	West	Total
Working gas	187.90	255.50	443.40
Weekly Change	-0.50	-7.70	-8.20
% of capacity	74.88%	63.53%	67.89%
Working Gas Jan 12, 2007	223.20	275.10	498.30

The information contained in this report is obtained from sources considered to be reliable. However, the information contained herein cannot be guaranteed with respect to its accuracy or completeness. Canadian Enerdata Ltd. assumes no responsibility for either the direct or indirect use of the information contained herein.

WEEKLY GAS FORWARDS

Northeast basis crumbles as cash prices slide; weather, constraints support Sumas

Northeast basis markets crumbled last week as traders returned from a long and frigid holiday weekend to rising temperatures and easing pipeline constraints. Cash prices also incurred steep losses and by Friday were as much as \$3.40 below February full values after several weeks of hefty premiums.

Sources said the basis declines were nothing more than a return to normalized levels given the long-range forecasts for seasonable temperatures and comfortable gas storage levels.

Transcontinental Gas Pipe Line's zone 6-New York February basis fell 70 cents to plus \$4.80/MMBtu over the week.

Following weeks of lackluster activity, Gulf Coast markets saw brisk action Friday as players aggressively bid up February and summer basis. "A lot of Gulf Coast pipes got

absolutely hammered this month," a Texas-based trader said. "People are coming in out of fear and are going to hedge it this month so they don't bleed out."

Transco's zone 3 February picked up 8.75 cents on Friday alone and ultimately gained 10 cents on the week.

The late-week NYMEX rally generally pushed most Midcontinent and Western financial basis markets as much as 13 cents lower last week, but forecasts for freezing weather proved a match for the contract in the Pacific Northwest, where pipeline restrictions propelled prices higher.

The February package at Northwest Pipeline's Sumas, Washington, hub jumped 38 cents over the week, with the biggest gains occurring Thursday. The pipeline issued an 8% overrun entitlement

Wednesday for receiving parties north of the Plymouth compressor station. It lifted the entitlement Friday, but Sumas February climbed another 10.5 cents Friday and ended the week at plus 42 cents.

With temperatures in Calgary forecast to average well below normal, Alberta's AECO hub posted net gains last week, rising 12.5 cents. Sources also attributed AECO's strength to strong cash prices through much of January, raising expectations for a higher-than-expected monthly index there.

In contrast, upper Midwest markets saw minimal movement at the front of the curve despite frigid weather.

The Chicago city-gates February basis fell 1.5 cents, while the Michigan Consolidated city-gates February basis lost 2.5 cents over the week. SSM/SN

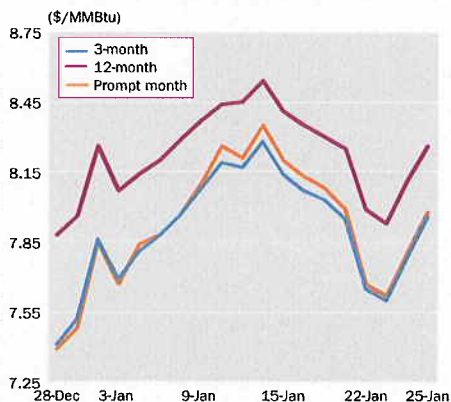
Basis differential

	Henry Hub	El Paso Permian	Agua Dulce	Transco Zone 3	Katy	Kern, Opal	Panhandle Tx.-Ok.	Chicago city-gates	Col. Gas Appa.	SoCal Gas
Weekly WACOG	8.22	7.90	7.92	8.96	7.97	7.93	7.96	8.64	8.48	7.86
Henry Hub		0.32	0.30	-0.74	0.25	0.29	0.26	-0.42	-0.26	0.36
El Paso, Permian	-0.32		-0.02	-1.06	-0.07	-0.03	-0.06	-0.74	-0.58	0.04
Agua Dulce	-0.30	0.02		-1.04	-0.05	-0.01	-0.04	-0.72	-0.56	0.06
Transco Zone 3	0.74	1.06	1.04		0.99	1.03	1.00	0.32	0.48	1.10
Katy	-0.25	0.07	0.05	-0.99		0.04	0.01	-0.67	-0.51	0.11
Kern, Opal	-0.29	0.03	0.01	-1.03	-0.04		-0.03	-0.71	-0.55	0.07
Panhandle, Tx.-Ok.	-0.26	0.06	0.04	-1.00	-0.01	0.03		-0.68	-0.52	0.10
Chicago city-gates	0.42	0.74	0.72	-0.32	0.67	0.71	0.68		0.16	0.78
Col. Gas Appa.	0.26	0.58	0.56	-0.48	0.51	0.55	0.52	-0.16		0.62
SoCal Gas	-0.36	-0.04	-0.06	-1.10	-0.11	-0.07	-0.10	-0.78	-0.62	
NYMEX Basis	0.237	-0.083	-0.063	0.977	-0.013	-0.053	-0.023	0.657	0.497	-0.123

NYMEX Basis is the NYMEX Henry Hub/cash basis differential calculated from the near-month settlement of \$7.983.

Henry Hub futures and strips

	01/21 Mon	01/22 Tue	01/23 Wed	01/24 Thu	01/25 Fri
Feb-08	NA	7.670	7.621	7.802	7.983
Mar-08	NA	7.647	7.581	7.783	7.954
Apr-08	NA	7.647	7.586	7.768	7.929
May-08	NA	7.701	7.641	7.820	7.975
Jun-08	NA	7.782	7.724	7.902	8.057
Jul-08	NA	7.863	7.808	7.985	8.140
Aug-08	NA	7.934	7.879	8.055	8.210
Sep-08	NA	7.947	7.892	8.067	8.222
Oct-08	NA	8.026	7.971	8.145	8.300
Nov-08	NA	8.286	8.226	8.393	8.545
Dec-08	NA	8.576	8.511	8.671	8.810
Jan-09	NA	8.806	8.736	8.890	9.020
3/strip	NA	7.655	7.596	7.784	7.955
6/strip	NA	7.718	7.660	7.843	8.006
9/strip	NA	7.802	7.745	7.925	8.086
12/strip	NA	7.990	7.931	8.107	8.262



Funds increase NYMEX positions

Noncommercial traders increased both long and short positions in the NYMEX Henry Hub gas futures contract for the week ending January 22, the Commodity Futures Trading Commission said Friday in its Commitments of Traders report.

Noncommercial traders, or funds, were 70.18% short, compared with 69.79% short the week prior. Their overall holdings increased by 8,840 lots to 262,028 contracts from 253,188 as of January 15. Noncommercial traders were net short by 105,752 contracts, compared with 100,218 contracts short a week earlier. They held 78,138 long positions as of January 22, up from 76,485 a week earlier, while their short positions increased to 183,890 lots from 176,703 lots as of January 15.

Meanwhile, commercial traders' overall holdings also increased for the week ending January 22. Commercial traders came in 54.53% long, compared with 54.33% long a week earlier. Commercial traders as of January 22 held 841,164 contracts — 458,721 long and 382,443 short. Those numbers represent a total increase of 10,012 contracts compared with the week ending January 15, when commercial traders held a total of 831,152 contracts — 451,556 long and 379,596 short.

Commitments of Traders

Rpt. Date	Long	Short	Spreading
22-Jan	78,138	183,890	293,559
15-Jan	76,485	176,703	290,574
8-Jan	82,425	176,542	283,164

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the attached *Surrebuttal Testimony and Exhibit of Frank Yoho on Behalf of Piedmont Natural Gas Company, Inc.* is being served this date via email and UPS Overnight (5 copies) upon:

Nanette S. Edwards
Office of Regulatory Staff
1441 Main Street
Suite 300
Columbia, South Carolina 29201
nsedwar@regstaff.sc.gov

And that a copy of the attached *Surrebuttal Testimony and Exhibit of Frank Yoho on Behalf of Piedmont Natural Gas Company, Inc.* is being served this date via email and U.S. Mail upon:

Catherine E. Heigel
Assistant General Counsel
Duke Energy Carolinas, LLC
P.O. Box 1006, EC03T
Charlotte, North Carolina 28201-1066
ceheigel@duke-energy.com

Scott Elliott
Elliott & Elliott, P.A.
721 Olive Street
Columbia, South Carolina 29205
selliott@elliottlaw.us

Bonnie D. Shealy
Robinson, McFadden & Moore, P.C.
P.O. Box 944
Columbia, South Carolina 29202
bshealy@robinsonlaw.com

Jane Lewis-Raymond
Vice President & General Counsel
Piedmont Natural Gas Company, Inc.
P.O. Box 33068
Charlotte, North Carolina 28233
jane.lewis-raymond@piedmontng.com

Frank R. Ellerbe III
Robinson, McFadden & Moore, P.C.
P.O. Box 944
Columbia, South Carolina 29202
fellerbe@robinsonlaw.com

Robert E. Tyson Jr., Counsel
Sowell Gray Stepp & Lafitte, LLC
P.O. Box 11449
Columbia, South Carolina 29211
rtyson@sowell.com

Lawrence B. Somers
Assistant General Counsel
Duke Power
P.O. Box 1244, PB05E
Charlotte, North Carolina 28201-1244
lbsomers@duke-energy.com

J. Blanding Holman, IV
Southern Environmental Law Center
Coastal Conversation League
Southern Alliance for Clean Energy
200 West Franklin St., Suite 330
Chapel Hill, North Carolina 27516
Bholman@selcnc.org

This the 29th day of January, 2008.

s/ James H. Jeffries IV
James H. Jeffries IV